

N^o 22,221



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COMPLETE SPECIFICATION.

Improvements in Artificial Tooth Crowns.

I, LEWIS SWEETMAN SEELEY, Surgeon Dentist, of No. 182 East 82nd Street, Borough of Manhattan, City, County and State of New York, United States of America, do hereby declare the nature of this invention, and in what manner the same is to be performed, to be particularly described and ascertained in
5 and by the following statement:—

The invention relates more especially to tooth-crowns which are fitted and attached to a natural root. The objects are so to construct the shank or pin, with which the crown is provided, as to afford a reliable means for securing the crown to the root, the shank also being adaptable to a double rooted tooth
10 as well as to a tooth having only one root.

To these ends the invention consists in the construction of a tooth crown having a pin or shank with the capabilities hereinafter more fully described and pointed out or indicated in and by the claim.

In the drawings Figure 1 is an enlarged view of a tooth-crown with its
15 doubled metal pin or shank: Figure 2 is an enlarged sectional view of the same and of a root to which the shank is secured; Figure 3 is a detached detail of one form of the shank; Figure 4 is a sectional view of a crown and shank, the latter having its extremities formed with a head or turned at an angle within the crown; Figure 5 is an enlarged sectional view of a crown shank
20 and root, the shank being expanded within the cavity of the root, somewhat above the return-bend.

In these drawings A represents the crown which may be made of porcelain or plastic material. The upper end *a* of the shank B is inserted in the material while plastic and baked therein in the usual manner. The shank is made of
25 a strip of metal or wire which is doubled so that the return-bend *b* forms the end; the metal strips of wire may be round, flat, or angular, but I prefer the latter, and they are usually of platinum or platino-iridium, though any other suitable metal may be used.

The two parts may be brought close to each other at or near the return-bend
30 or end *b* of the shank, thus allowing a taper, and even a point to be made at the extremity which extends deepest into the canal of the root C of the natural tooth. This taper or point may be made either at the time of manufacture or when the crown is being fitted to the root on which it is to be secured. If the tooth has a double root, the return-bend may be cut or filed so as to allow
35 of a separation of the parts of the shank, which, being spread, will form two shanks, one for each root.

A space *c* is left between the two parts after leaving the return-bend, or they may be expanded as at *d*, Figure 5, so as to fit an enlarged cavity or admit the cement or filling, which will form, as it were, a bridge or solid mass across
40 the canal of the root. This, together with the hold which the cement takes on the walls of the root, will secure the crown more firmly than where dependance is placed entirely upon screw-threads, flanges or other conformations on the exterior of the shank.

[Price 8d.]

Seeley's Improvements in Artificial Tooth Crowns.

The doubled metal strip or wire of which the shank is formed is capable of being spread to extend across the cavity in the root, bracing the shank against the sides thereof, and leaving the enlarged opening *d* between the strips, which will be filled with the cement. Such adjustment and bracing of the shank holds the crown steady while the cement is hardening or until it is set, and also makes the crown much more firm, so that mastication of food is less liable to jar or loosen the shank by a continued use of the tooth thus repaired. 5

Moreover, a crown provided with a shank formed of a double strip of wire such as I have shown and described, is simple in construction and cheap to manufacture, in which particulars, as well as in its capability for adjustment so as to form a brace in the root, my improvement presents important advantages over other forms of crowns having shanks or pins as the same have heretofore been constructed. 10

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed I declare that what I claim is:— 15

A tooth crown provided with an open tapered shank formed of a single wire, the two lengths of which are spaced apart and converged at their outer connected ends, and baked with the crown at their inner ends, whereby the shank will conform to an ordinary tapered tooth cavity or may be bulged outwardly to conform to a cavity of different shape, or may be divided at its outer extremity or point to form two prongs for a double cavity, substantially as set forth. 20

Dated this 7th day of November 1899. 25

ALLISON BROS.,
Agents for the Applicant.

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Fig. 1.

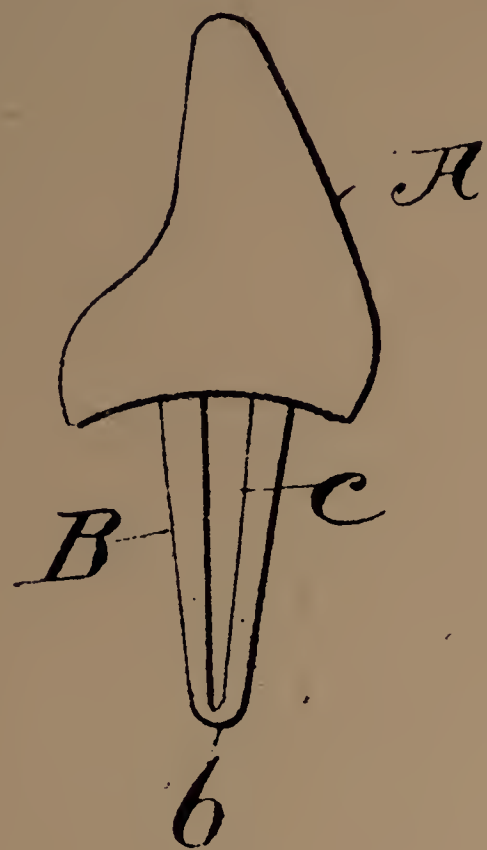


Fig 2

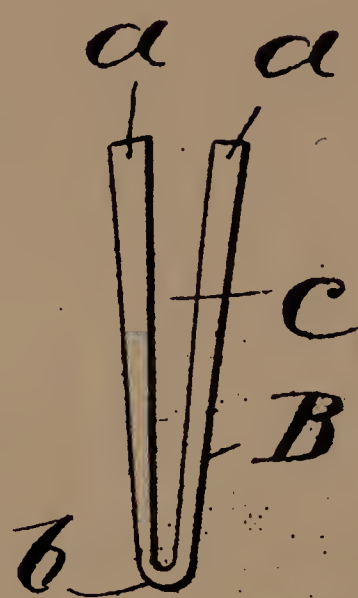
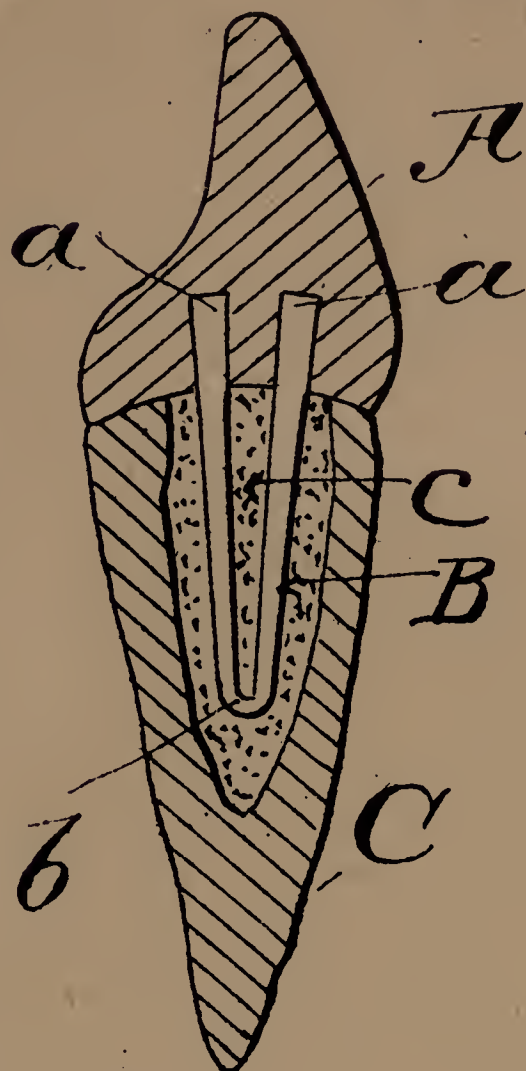


Fig. 3.

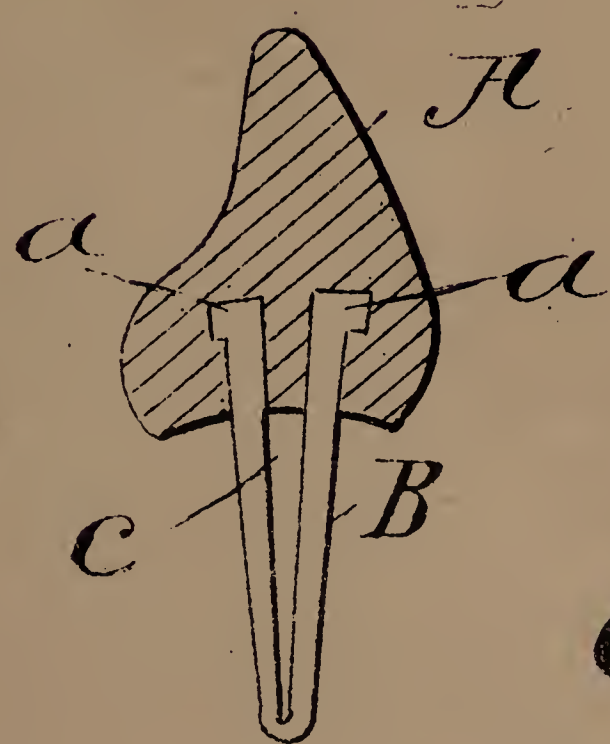


Fig. 4.

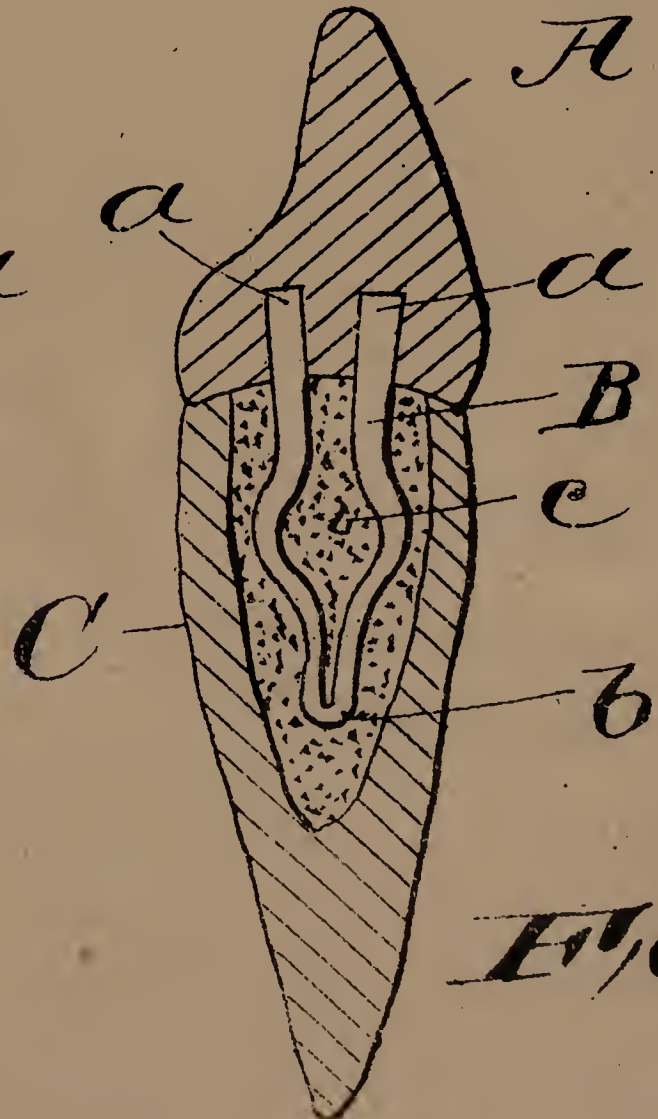


Fig. 5.

[This Drawing is a reproduction of the Original on a reduced scale.]

